

Safety Data Sheet

1. Identification

Product identifier used on the label: STARFIRE FULL SYNTHETIC EURO FORMULA 0W40, 5W30, 5W40

Other means of identification:

Synonyms: No data available

Recommended use of the chemical and restrictions on use:

Recommended use: Motor Oil

Restrictions on use: Uses other than those described above

Name, address, and telephone number of the chemical manufacturer, Supplier, or other responsible party: Pennstar
6 Horwith Dr.
Northampton, PA 18067

Phone number: +01 (484) 275-7990

Emergency phone number: CHEMTREC: +1 (800) 424-9300 International: +01 (703) 527-3887

2. Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

GHS Classification: Not classified as hazardous under OSHA

Hazards not otherwise classified: Avoid prolonged or repeated contact with used motor oil. Used motor oil has been shown to cause skin cancer in laboratory animals.

% unknown toxicity (Inhalation Gas): 10.455775 % of the mixture consists of ingredient(s) of unknown toxicity.

3. Composition/information on ingredients

Chemical Name	Common name and synonyms	CAS #	%
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	No data available	72623-86-0	1 - 5
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	No data available	72623-87-1	1 - 5
Petroleum distillates, solvent-refined heavy paraffinic	No data available	64741-88-4	0.5 - 1.5
2-Butenedioic acid (E)-, di-C8-18-	No data available	68610-90-2	0.5 - 1.5

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alkyl ester			
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One or more hazardous ingredient(s) is claimed as a trade secret under the OSHA Hazard Communication Standard. The hazards of this (these) ingredient(s) are given on this SDS.

4. First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.
Eye Contact:	Use eye wash to remove a chemical from the eye. Flush the affected eye for at least fifteen minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical attention if irritation persists.
Skin Contact:	Wash with soap and water. Get medical attention if irritation develops or persists. Seek medical advice if symptoms persist.
Ingestion:	Minimal risk of harm if swallowed. Do not induce vomiting. Seek medical attention immediately. Provide medical care provider with this SDS.

Most important symptoms/effects, acute and delayed: None Known

Indication of immediate medical attention and special treatment needed, if necessary: Aspiration during swallowing or vomiting may severely damage the lungs. If evacuation of stomach contents is necessary, use method least likely to cause aspiration.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media: Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.

Unsuitable extinguishing media: No data available

Specific hazards arising from the chemical: No data available

Hazardous combustion products: Carbon monoxide, Smoke

Special protective equipment and No data available

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precautions for fire-fighters:

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	No health effects expected from the clean up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this SDS.
Methods and materials for containment and cleaning up:	Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Dispose of according to Federal, State, Local, or Provincial regulations. Used fluid should be disposed of at a recycling center.

7. Handling and storage

Precautions for safe handling:	Mildly irritating material. Avoid unnecessary exposure. No data available
Conditions for safe storage, including any incompatibilities:	
Safe storage conditions:	Store in a cool dry place. Isolate from incompatible materials.
Materials to Avoid/Chemical Incompatibility:	Strong oxidizing agents

8. Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

Chemical component	OSHA PEL	ACGIH TLV	ACGIH STEL	IDLH
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	5 mg/m ³	5 mg/m ³	10 mg/m ³	No data available
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	5 mg/m ³	5 mg/m ³	10 mg/m ³	No data available
Petroleum distillates, solvent-refined heavy	5 mg/m ³	5 mg/m ³	10 mg/m ³	No data available

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paraffinic				
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Appropriate engineering controls: Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.

Individual protection measures, such as personal protective equipment:

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

Respirator Type(s): None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

Eye protection: No special requirements under normal industrial use.

Skin protection: Where use can result in skin contact, practice good personal hygiene and wear impervious gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Neoprene, Nitrile

General hygiene conditions: No data available

9. Physical and chemical properties

Appearance (physical state, color etc.):

Physical state: Liquid

Color: Amber

Odor: Mild

Odor Threshold: Not determined

pH: Not determined

Melting point/freezing point:

Melting Point: No data available

Freezing point: No data available

Initial boiling point and boiling range (°C): Not determined

Flash Point (°C): 222

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Flash Point Method:	COC
Evaporation Rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	
Upper flammability or explosive limits:	Not established
Lower flammability or explosive limits:	Not established
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	0.85
Solubility(ies):	Negligible; 0-1%
Partition coefficient: n-octanol/water:	Not determined
Auto-ignition temperature:	No data available
Decomposition Temperature:	Not determined
Viscosity:	61.0 -79.3
Volatile organic compound (VOC) content and percentage of volatiles:	0.000000

10. Stability and reactivity

Reactivity:	No data available
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	No data available
Conditions to avoid (e.g., static discharge, shock, or vibration):	Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Moisture (will lead to product performance degradation).
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon monoxide, Smoke

11. Toxicological information

Description of the various toxicological (health) effects and the available data used to identify those effects:	
Information on the likely routes of	No data available

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exposure (inhalation, ingestion, skin and eye contact):

Symptoms related to the physical, chemical and toxicological characteristics: None Known

Delayed and immediate effects and also chronic effects from short- and long-term exposure:

Ingestion Toxicity: Although this product has a low order of acute oral toxicity, aspiration of minute amounts into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

Skin Contact: This material is likely to be slightly irritating to skin based on animal data. Can cause minor skin irritation, defatting, and dermatitis.

Absorption: Likely to be practically non-toxic based on animal data.

Inhalation Toxicity: Harmful! Can cause systemic damage (see "Target Organs"). Likely to be practically non-toxic based on animal data.

Eye Contact: This material is likely to be non-irritating to eyes based on animal data.

Sensitization: No data available

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

Carcinogenicity: Not expected to cause cancer. This product meets the IP-346 criteria of <3% PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.

STOT-single exposure: Non-hazardous under Specific Target Organ Systemic Toxicity Single Exposure category.

STOT-repeated exposure: Non-hazardous under Specific Target Organ Systemic Toxicity Repeated Exposure category.

Aspiration hazard: Non-hazardous under Aspiration category.

Other information: No data available

Numerical measures of toxicity (such as acute toxicity estimates):

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	OLD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat 2.18 mg/L

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Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OLD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat 2.18 mg/L
Petroleum distillates, solvent-refined heavy paraffinic	OLD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat 2.18 mg/L
2-Butenedioic acid (E)-, di-C8-18-alkyl ester	OLD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 5000 mg/kg	No data available

Is the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

Chemical Name	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen
There are no components that are known or reported to cause cancer.			

12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available): No data available

Ecological Toxicity Data:

Chemical Name	CAS #	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
No data available				

Persistence and degradability: Biodegrades slowly.

Bioaccumulative potential: Bioconcentration may occur.

Mobility in soil: This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.

Other adverse effects (such as hazardous to the ozone layer): No data available

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated Spent or discarded material is non-hazardous according to environmental regulations.

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packaging:

Contaminated packaging: Recycle containers whenever possible.

14. Transport information

Carriage of dangerous goods by road (DOT), rail or inland waterways:

No data available

International carriage of dangerous goods by sea (IMDG/IMO):

No data available

International carriage of dangerous goods by air (IATA):

No data available

Environmental hazards (e.g., Marine pollutant (Yes/No)): None.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): No data available

Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises: No data available

15. Regulatory information

Safety, health and environmental regulations specific for the product in question:

TSCA Status: All components of this material are on the US TSCA Inventory or are exempt.

Regulated Components:

Chemical Name	CAS #	CERCLA	Sara EHS	Sara 313	U.S. HAP
Highly refined synthetic base stocks	64742-54-7	N	N	N	N
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	N	N	N	N
Lubricating oils (petroleum), C20-50, hydrotreated neutral	72623-87-1	N	N	N	N

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oil-based					
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	N	N	N	N
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	N	N	N	N
2-Butenedioic acid (E)-, di-C8-18-alkyl ester	68610-90-2	N	N	N	N
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	N	N	N	N
Polybutene	9003-29-6	N	N	N	N

Chemical Name	CAS #	California Prop 65 - Cancer	California Prop 65 - Dev. Toxicity	California Prop 65 - Reprod fem	California Prop 65 - Reprod male
Highly refined synthetic base stocks	64742-54-7	N	N	N	N
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	N	N	N	N
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	N	N	N	N
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	N	N	N	N
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	N	N	N	N
2-Butenedioic acid (E)-, di-C8-18-alkyl ester	68610-90-2	N	N	N	N
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	N	N	N	N
Polybutene	9003-29-6	N	N	N	N

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Chemical Name	CAS #	Massachusetts RTK List	New Jersey RTK List	Pennsylvania RTK List	Rhode Island RTK List	Minnesota Hazardous Substance List
Highly refined synthetic base stocks	64742-54-7	N	N	N	N	N
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	N	N	N	N	N
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	N	N	N	N	N
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	N	N	N	N	N
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	N	N	N	N	N
2-Butenedioic acid (E)-, di-C8-18-alkyl ester	68610-90-2	N	N	N	N	N
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	N	N	N	N	N
Polybutene	9003-29-6	N	N	N	N	N

16. Other information, including date of preparation or last revision.

SDS Prepared by: CPERKINS
Revision Date: 01/14/2019
Revision Number: 19
Reason for revision: NEW VERSION
References: No data available
Other Info: No data available

Disclaimer: This safety data sheet and the information it contains is offered to you in

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